For Ecology Use Only

Received: Received SEP 07 2012 Date Stamp DEPT OF ECOLOGY CENTRAL REGION OFFICE

Reviewed by: _____

Date Reviewed: _____

Yakima County
WATER CONSERVANCY BOARD
Application for Change/Transfer
Record of Decision

Applicant: Andy Creek Water Users Association Application Number: YAKI-10-02

This record of decision was made by a majority of the board at an open public meeting of the Yakima County Water Conservancy Board held on the 6th day of September, 2012.

x Approval:

The Yakima County Water Conservancy Board hereby **grants** conditional approval for the water right transfer described and conditioned within the report of examination dated the 6th day of September, 2012, and submits this record of decision and report of examination to the Department of Ecology for final review.

☐ **Denial:**

The Yakima County Water Conservancy Board hereby **denies** conditional approval for the water right transfer as described within the report of examination on the _____ day of _____, 2012 and submits this record of decision to the Department of Ecology for final review.

Signed:

_____ Date: 9-6-2012
Jeff Stevens, Chair
Yakima County Water Conservancy Board

Approve ☐ Deny ☐ Abstain ☐ Recuse ☒

_____ Date: 9-6-12
Dave Brown, Member
Yakima County Water Conservancy Board

Approve ☒ Deny ☐ Abstain ☐ Recuse ☐

_____ Date: 9/6/2012
Mark Reynolds, Member
Yakima County Water Conservancy Board

Approve ☒ Deny ☐ Abstain ☐ Recuse ☐

_____ Date: _____
Dave England, Alternate Voting Member
Yakima County Water Conservancy Board

Approve ☐ Deny ☐ Abstain ☐ Recuse ☐

Hand delivered to the Department of Ecology Central Regional Office of Ecology, hand-delivered, and other interested parties on _____.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Yakima County
WATER CONSERVANCY BOARD
Application for Change/Transfer
OF A RIGHT TO THE BENEFICIAL USE OF THE PUBLIC WATERS OF THE STATE OF WASHINGTON

DEPT OF ECOLOGY Received SEP 07 2012 REGIONAL REGION OFFICE

Report of Examination

NOTE TO APPLICANT: Pursuant to WAC 173-153-130(8), the applicant is not permitted to proceed to act on the proposal until Ecology makes a final decision affirming, in whole or in part, the board's recommendation. It is advised that the applicant not proceed until the appeal period of Ecology's decision is complete. **NOTE TO AUTHOR:** *Read the instructions for completing a water conservancy board report of examination. Use the F11 key to move through the form.*

Surface Water X Ground Water

DATE APPLICATION RECEIVED	WATER RIGHT DOCUMENT NUMBER (i.e., claim, permit, certificate, etc.)	WATER RIGHT PRIORITY DATE	BOARD-ASSIGNED CHANGE APPLICATION NUMBER
09/14/2010	Court Claim 1318	November 16, 1950	YAKI-10-02

NAME: Andy Creek Water Users Association (ACWUA)

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
PO Box 756	Naches	WA	98937

Changes Proposed: ☒ Change purpose ☐ Add purpose ☐ Add irrigated acres ☐ Change point of diversion/withdrawal ☒ Add point of diversion/withdrawal ☒ Change place of use Other (Temporary, Trust, Interties, etc.)_____

SEPA
The board has reviewed the provisions of the State Environmental Policy Act of 1971, Chapter 43.21C RCW and the SEPA rules, chapter 197-11 WAC and has determined the application is: ☒ Exempt ☐ Not exempt

BACKGROUND AND DECISION SUMMARY

Existing Right (Tentative Determination)

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE
0.2	90	10	Continuous municipal supply

SOURCE	TRIBUTARY OF (IF SURFACE WATER)
Andy Creek	Rimrock Lake

AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
13143199992	S 1/2	SE	31	14	13 EWM	38	Yakima

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED

Andy Creek Summer Home Tract within the NW ¼ Section 5 and the SE ¼ NE ¼ Section 6, of unsurveyed T 13N, R 13 EWM, Snoqualmie National Forest.

PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,
13130599992		NW	5	13	13 EWM
13130699992	SE	NE	6	13	13 EWM

Proposed Use

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE
0.20	90	10	Continuous municipal water supply

SOURCE	TRIBUTARY OF (IF SURFACE WATER)
Well BAE-935 and Andy Creek	Rimrock Lake

AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
13130699992	NE	SE	6	13	13 EWM	38	Yakima
13143199992	S 1/2	SE	31	13	13 EWM		

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Andy Creek Summer Home Tract within the NW ¼ Section 5, of unsurveyed T 13N, R 13 EWM, Snoqualmie National Forest and SE ¼ NE ¼ Section 6, T 13 N, R 13 EWM.

PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,
13130599992		NW	5	13	13 EWM
13130699992	SE	NE	6	13	13 EWM

Board's Decision on the Application

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE
0.2	90	10	Continuous municipal water supply

SOURCE	TRIBUTARY OF (IF SURFACE WATER)
Well BAE-935 and Andy Creek	Rimrock Lake

AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
13130699992	NE	SE	6	13	13 EWM	38	Yakima
13143199992	S 1/2	SE	31	13	13 EWM		

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED AS APPROVED BY THE BOARD

The place of use shall be the Andy Creek Summer Home Tract within the NW ¼ Section 5, of unsurveyed T 13N, R 13 EWM, Snoqualmie National Forest and SE ¼ NE ¼ Section 6, T 13 N, R 13 EWM.

PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,
13130599992		NW	5	13	13 EWM
13130699992	SE	NE	6	13	13 EWM

DESCRIPTION OF PROPOSED WORKS

The system consists of existing potable and non-potable systems. A schematic of the water systems is provided in Figure 1 (Appendix C).

The potable water system is classified as a Group A, Transient Non-Community water system by the Washington State Department of Health (DOH) under Water System ID # 02450. The water source is a well located on United States Forest Service (USFS) property in the Indian Creek Campground on the south side (lake side) of Highway 12. WDOH designated the well as Source 02, Well #1 and its Ecology Unique Well Number is BAE-935. Raw water is pumped from the well directly to a 15,000 gallon steel storage tank located on a hillside several hundred feet north of the cabins in the Andy Creek Tract. The storage tank provides gravity flow for domestic use for up to 72 cabins and fire suppression via 19 fire hydrants. Source flow is measured at the wellhead using a 2-inch turbine meter. The well was drilled in September 2010, is 8-inch diameter, is completed at a depth of 102 feet, and screened from a depth of 87 feet to 97 feet. The drilling log indicates well yield is about 75 gallons per minute (gpm). The well is equipped with a 5 horsepower submersible pump that pumps up to about 39 gpm at normal operating pressure. The water system is volunteer-managed by ACWUA members. Meter readings and static water levels have been regularly recorded at the well since the well was placed into use (Table 3).

The non-potable water system is used for auxiliary fire suppression, minor irrigation and dust-abatement. Surface water is diverted from the historical point of diversion under Court Claim 1318 located on the western most fork of Andy Creek (not shown on most standard maps). Water from the surface water diversion is routed through a control box to distribution lines that are separate from the domestic lines. During construction of the new domestic lines, non-potable service was severed to several cabins. ACWUA maintains the ability to connect non-potable water to fire hydrants for additional fire suppression water. Surface diversion works can divert the 0.2 cfs (90 gpm) authorized.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE:
Completed	Completed	Completed

This change represents a defacto change under Ecology Policy 1280. The Board believes no further work other than this authorization is necessary to effectuate this change.

REPORT

NOTE TO AUTHOR: This form reflects the minimum regulatory requirements as required in WAC 173-153-130(6). In accordance with WAC 173-153-130(5), "It is the responsibility of the water conservancy board to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." **Completion solely of the minimum regulatory requirements may not constitute a fully documented decision.**

BACKGROUND [See WAC 173-153-130(6)(a)]

On August 5, 2010 Andy Creek Water Users Association (ACWUA) of Naches, Washington filed an application for change to add a point of diversion under Court Claim 1318. The application was accepted at an open public meeting, and the board assigned application number YAKI-10-02. The file number CS4-1318sb17 was assigned by Ecology to that application for change. The application was amended on May 8, 2012 to include changes to purpose of use and place of use. The Board transmitted the change application and relevant attachments to Ecology, a copy of which is provided in Appendix A.

Table 1: Attributes of the Water Right Certificate as Currently Documented

Name on certificate, claim, permit: Andy Creek Water Users, Inc.
Water right document number: Court Claim 1318
As modified by certificate of change number: N/A.
Priority date, first use: November 16, 1950
Water quantities: Qi: 0.2 cfs Qa: 10 acre-feet
Source: Andy Creek tributary to Rimrock Lake and the Tieton River
Point of diversion/withdrawal: 300 feet north and 1,000 feet west of the southwest corner of Section 31, being within the S ½ SE ¼ of Section 31 of unsurveyed T 14 N, R 13 EWM, Snoqualmie National Forest
Purpose of use: Community domestic supply for 72 summer homes (back up supply)
Period of use: Continuously
Place of use: Andy Creek Summer Homes Tract within the NW ¼ of Section 5, of unsurveyed T 13 N, R 13 EWM, Snoqualmie National Forest
Existing provisions: N/A
Previous transfers associated with this water right: None

ACWUA wishes to add an existing well as a new source to provide a reliable and safe source of domestic water, to change the purpose of use to continuous municipal water supply (or conform the existing use to municipal), and to add to the place of use to correct an error in Court Claim 1318.

The Yakima County Water Conservancy Board (Board) determined that ACWUA has adequate ownership interest to authorize changes to the Court Claim 1318 water right. They are the certificate holder and operator of the water system, which qualifies under the exception listed on Page 3 of Ecology Guidance 2040.

Figure 1 (Appendix C) shows the general layout of the Andy Creek Summer Homes Tract, the historic (existing) point of diversion, place of use for Court Claim 1318, the proposed point of withdrawal and key features of the water system.

For comparison, the Board also provides a screen shot from Ecology's webmap in Figure 2. The figure shows the place of use (yellow/green hatching) and existing point of diversion (yellow dot) for Court Claim 1318 (S4-83208-J in webmap). An "unmapped" surface headworks (green dot) also shows up in webmap placed in the center of Section 31 (S4-09987, the original appropriative certificate issued by Ecology) . The proposed well point of withdrawal (Cs4-1318-sb17) is also shown (red dot).

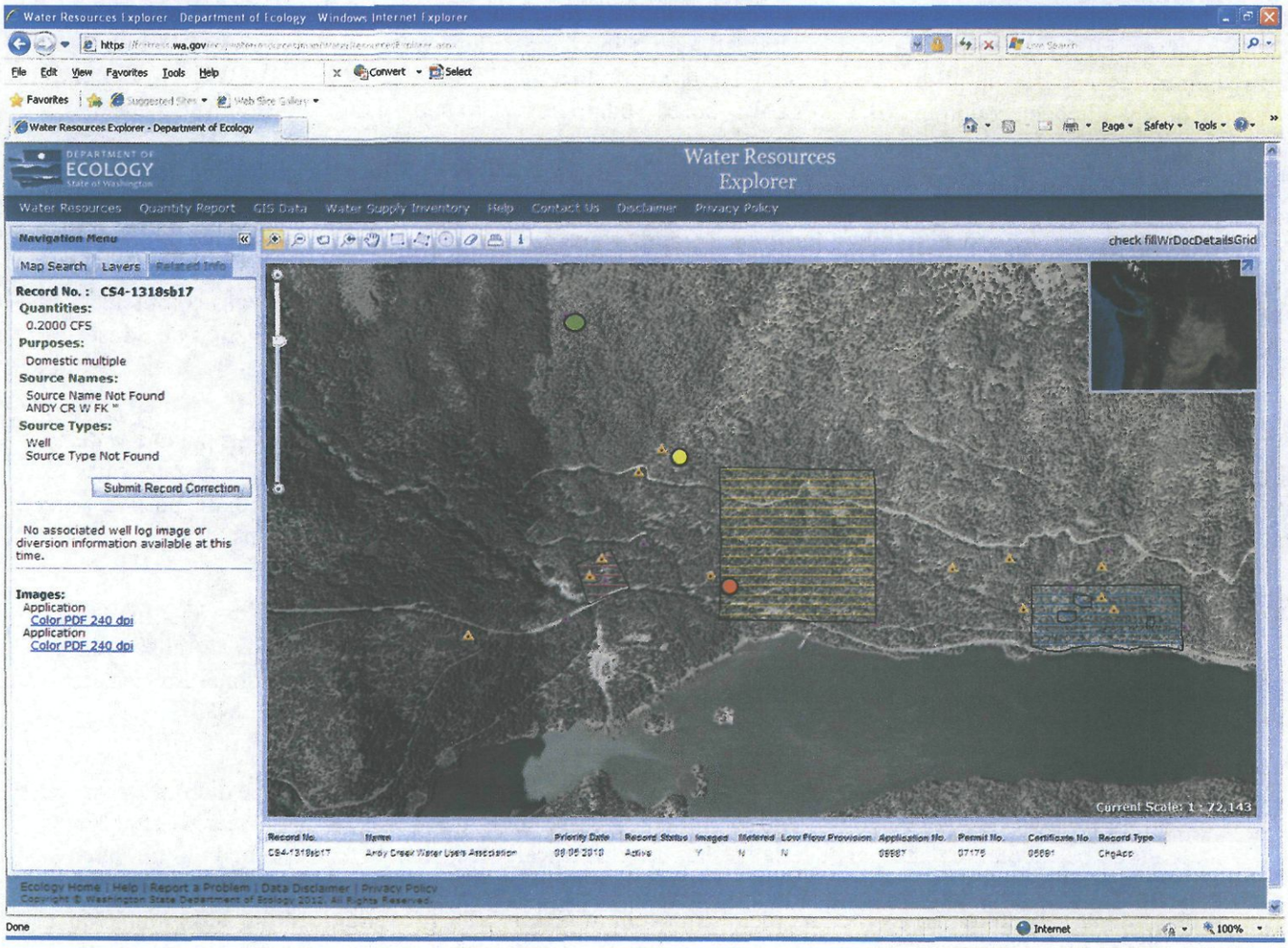

Figure 2: Ecology Webmap Display for Court Claim 1318

History of water right

The following history of the water right was assembled based on review of Ecology files, a water system Project Report Source Approval (Gray and Osborne, 2011), a site visit, interviews with Roger Meyer of ACWUA, and other records.

ACWUA (aka Andy Creek Water Users Association, Andy Creek Water Users, Inc.) began diverting water from Andy Creek in about 1950 for use in 72 recreational cabins located in NW ¼ Section 5, and NE 1/4 of SE ¼ Section 6, T 13 N, R 13 EWM (Report of Referee, 1988, see Appendix A). The water right history is summarized in Table 2. According to Roger Meyer (ACWUA), the pipeline from the surface diversion to the cabin development was constructed in about 1951. The diversion is from the western-most fork of Andy Creek that is not shown on most maps.

Certificate of Surface Water Right No. 5691 (S4-09987) with priority date of November 16, 1950 was issued in April 1954 (Appendix A) to the Andy Creek Water Users, Inc. authorizing diversion from the west fork of Andy Creek of 0.20 cfs (90 gpm) and up to 10 acre-feet annually for domestic supply of 72 summer homes within the S/W ¼ of Section 32, T 14 N, R 13 EWM and in the NW ¼ of Section 5, T 13 N, R 13 EWM.

Water was continuously used in the manner described above from 1950 until about 1980 when the local health district advised the Andy Creek Water Users they would need to begin chlorinating the domestic water or seek an

alternate source in response to the Surface Water Treatment Rule (Report of Referee, 1988, Appendix A). Due to costs, ACWUA elected to use a second source for domestic supply.

In 1980, ACWUA entered an agreement with the USFS to use and share in maintenance of a USFS-owned well (Ecology Well ID AFL-752) for domestic supply located in the Indian Creek Campground and a USFS-owned redwood storage tank located on the west side of Andy Creek. The original Andy Creek surface water diversion system was left intact and maintained for fire suppression and as a backup supply for domestic water (Report of Referee, 1988). The agreement was for use of the well only; the USFS well was only a permit-exempt well and Andy Creek continued to rely on its water right during this time period, just from an unauthorized point of withdrawal.

From 1980 until 2010, ACWUA used the Indian Creek Campground well for domestic supply and the original surface water diversion for fire suppression, backup domestic, minor irrigation and dust abatement. At some point during this period, Silver Beach Resort also entered a similar agreement with the USFS to use the Indian Creek Campground well for domestic water as an alternative to using their surface water diversion. A 15,000-gallon buried tank was installed uphill from the cabin development in about 1982 (Roger Meyer, ACWUA). Concurrent with the new well construction in 2010, a line was bored under Hwy 12 to supply the domestic water lines.

In 2008, the USFS notified ACWUA it would no longer allow ACWUA (and Silver Beach Resort) to use the Indian Creek Campground well. On September 22, 2010 ACWUA completed a new well (BAE 935) located about 140 feet north of the USFS well in the Indian Creek Campground. Silver Beach Resort completed a new well (BAE 936) on September 23, 2010 in the Indian Creek Campground, about 100 feet to the west of the ACWUA well. ACWUA has used the new well as a domestic source since 2011. Since the new well was completed, ACWUA has used the Andy Creek diversion for fire suppression, backup supply, minor irrigation and dust abatement.

Presently, ACWUA uses the new well for primary domestic supply and fire suppression within its potable water system. ACWUA maintains the original surface water diversion constructed in 1951, which is a separate water system for non-potable uses (irrigation and dust abatement) that is capable of being cross-connected with the potable water system as a backup for fire suppression and domestic supply. The water system serves 72 cabins.

The original Surface Water Right No. 5691 was evaluated in the 1988 Report of Referee for the Yakima River Basin Water Rights Adjudication (The State of Washington, Department of Ecology v. James J. Acquavella, et al.) and recommended the Court award ACWUA the water right as shown in Table 1. A Conditional Final Order (CFO) for Subbasin 17 established the ACWUA water right as Court Claim 1318 on June 9, 1989.

Unlike in many situations where a defacto change in source took place, the Report of Referee did not recommend ACWUA apply for a water right change to add the Indian Creek Campground well. It is unclear whether the Court fully understood based on the testimony available that the USFS well on which ACWUA relied did not have permitted water rights, and that ACWUA would continue to rely on its water rights. The Board suspects that this lack of clarity was caused in part by the fact that Acquavella was only a surface adjudication, and groundwater was not within the Court's purview. Because of inaccurate survey information, the Court also did not identify that a few of the lots served on the westernmost boundary of ACWUA's service area lie across the section line in Section 31. Table 2 summarizes the ACWUA water system history described above.

Table 2: Summary of Water System History After Certificate Issued

Date	Event
1950	Andy Creek Water Users begin withdrawing from Creek for domestic supply to 72 cabins
1951	Distribution line from diversion completed
1954	ACWUA granted Surface Water Certificate No. 5691 to withdraw from Andy Creek
1980	Health agency informs ACWUA it must begin chlorinating surface water for domestic use or seek an alternate source
1980	ACWUA enters agreement to use and maintain USFS Well at Indian Creek Campground and redwood storage tank
1982	15,000 gallon buried storage tank constructed
1988	Ecology recommends to Court water right conditions shown in Table 1 that are consistent with original certificate
1989	Conditional Final Order for Subbasin 17 issued establishing ACWUA water right as Court Claim 1318
2008	USFS notifies ACWUA (and Silver Beach Resort) will no longer be able to use USFS well
2010	ACWUA submits change application to Court Claim 1318 to add a point of withdrawal
2010	ACWUA completes new well (BAE 935) intended as new point of withdrawal
2011	ACWUA begins using new well for domestic supply
2012	ACWUA amends change application to add change to purpose of use and add a place of use (correcting an error in Court Claim 1318)

COMMENT AND PROTESTS [See WAC 173-153-130(6)(b)]

Public notice of the amended application was given in the Yakima Herald Republic on June 30 and July 3, 2012. The protest period ended on August 3, 2012. There were no protests received during the 30 day protest period. Notices of the application were also provided to the Washington State Department of Fish and Wildlife and Department of Archeology and Historical Preservation, the Eastern Washington Council of Governments, and the Yakama Nation on June 28, 2012. In addition, no oral and written comments were received at an open public meeting of the board or other means as designated by the board. Copies of all notices are provided in Appendix B.

A public records request submitted to Department of Ecology in May 2012 specifically requested whether there are any exceptions on file. No exceptions were provided for either the change application or Court Claim 1318 resulting from the Conditional Final Order for Subbasin 17.

SEPA

This proposal is exempt from SEPA as the project is for a groundwater authorization less than 2,250 gpm.

INVESTIGATION [See WAC 173-153-130(6)(c)]

The following information was obtained from a site inspection conducted by Dan Haller and Bill Sullivan of Aspect Consulting and Dave England of the Yakima County Water Conservancy Board on June 22, 2012, Yakima County records, research of Ecology records, aerial photos, and conversations with the applicant and other interested parties.

Aerial Photo Review

The Board evaluated available aerial photographs to corroborate information obtained during site visits and review of Ecology and County files. Aerial photos from GoogleEarth were available for the site from the following dates, key excerpts of which are incorporated into this Report of Examination for illustrative purposes:

- July 16, 1996
- July 31, 2006
- August 8, 2006
- April 6, 2009
- September 11, 2009
- November 4, 2011
- NAIP Photo 2011

Heavy tree cover precludes the use of aerial photos to document infrastructure improvements and ACWUA has minimal outdoor water use (dust abatement and minor spot irrigation use). Figure 3 (Appendix C) is shown to illustrate the general layout of the Andy Creek vicinity for a recent time period, showing an aerial photo from 2011, within a year after the new well was drilled.

Washington State Department of Health Data

The Board reviewed information about the ACWUA Water System (Water System ID 02450) from Department of Health (DOH) records indicating the water system supports 72 connections. The following is an excerpt of the DOH Water Facilities Inventory (WFI) for 02450 accessed from DOH Sentry Database in July 2012.

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
02450 X	ANDY CREEK WATER USERS	YAKIMA	A	TNC

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)	0	72	73
A. Full Time Single Family Residences (Occupied 180 days or more per year)	2		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	70		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		72	73

29. FULL-TIME RESIDENTIAL POPULATION	
A. How many residents are served by this system 180 or more days per	4

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?	20	20	20	50	125	100	125	100	125	75	25	50
B. How many days per month are they present?	31	28	31	30	31	30	31	31	30	31	30	31
31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												
32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

The ACWUA water system does not have a water system plan on record with DOH, but is currently developing a Small Water System Management Program. The WFI excerpt above provides corroboration of water system plan history and connection information.

Metered Water Use Data

Metered water use for the new well from October 2011 through June 2012 was provided by ACWUA (Table 3). Examination of metered data indicates water use over the 246-day period totaled 1,043,598 gallons (3.2 acre feet) and averaged 4,242 gallons per day (gpd). ACWUA cabin owners use water similar to residents on the other hundreds of lots leasing land from the USFS. Metered water use varies from year-to-year based on individual cabin owner decisions regarding vacations and use of part-time residences. Meter data confirm water use varies throughout the year with water use increasing in the spring and on weekends. However, the water use records are of only limited value because they are not yet available for summer months (or for a backlog of years). Water use is expected to increase significantly during the summer, when peak cabin use occurs.

Non-potable demands from Andy Creek are in addition to these results. ACWUA entered into an agreement with the North Yakima Conservation District for a water metering device "cost share" contract in March 2006. The meter was installed sometime in May, 2007. This meter is located in a surface source vault the Board observed on the site visit. Meter readings for the surface diversions are available from 2007 to 2009. The surface source meter stopped working sometime in August 2009 and is part of this year's repair list. In 2007 and 2008, water was diverted from May to October (non-freezing season) totaling 0.63 acre-feet and 0.65 acre-feet, respectively. During those years, ACWUA relied also on the USFS well for which meter data is unavailable. As a provision of this change, ACWUA will repair the meter and report both surface and well diversions to ensure the ACWUA water right is not exceeded.

Table 3. Metered water use and water levels recorded at the new well source

Date	Days since last reading	Total Use (gal)	Use Since Last Reading (gal)	Static Water Level (ft)
10/17/11		144,145		
10/20/11	3	156,974	12,829	
10/22/11	2	167,300	10,326	
10/23/11	1	171,000	3,700	
10/28/11	5	191,230	20,230	
10/31/11	3	203,000	11,770	
11/20/11	20	253,500	50,500	
11/28/11	8	286,428	32,928	
11/29/11	1	289,530	3,102	
12/08/11	9	318,381	28,851	
12/9/2011	1	321,557	3,176	23'
12/10/2011	1	323,265	1,708	23'
12/10/2011	0	323,913	648	23'
12/15/2011	5	354,350	30,437	23
12/15/2011	0	370,350	16,000	23
12/16/2011	1	371,850	1,500	23
1/2/2012	17	443,426	71,576	22
1/2/2012	0	445,114	1,688	23
1/4/2012	2	449,708	4,594	
1/30/2012	26	573,471	128,357	
2/11/2012	12	648,602	75,131	
2/12/2012	1	655,176	6,574	
2/20/2012	8	700,433	45,257	
2/26/2012	6	733,417	32,984	
3/16/2012	19	785,428	52,011	
3/25/2012	9	811,766	26,338	
4/5/2012	11	839,470	27,704	
4/5/2012	0	840,918	1,448	
4/7/2012	2	845,523	4,605	
4/9/2012	2	851,761	6,238	
4/10/2012	1	854,746	2,985	
4/12/2012	2	859,315	4,569	
4/13/2012	1	862,469	3,154	
4/14/2012	1	865,430	2,961	
4/15/2012	1	868,672	3,242	
4/16/2012	1	871,608	2,936	
4/17/2012	1	873,110	1,502	
4/18/2012	1	876,130	3,020	
4/20/2012	2	880,770	4,640	
4/21/2012	1	883,883	3,113	
4/22/2012	1	888,335	4,452	
4/22/2012	0	888,475	140	
4/27/2012	5	902,691	14,216	
4/29/2012	2	907,410	4,719	
5/1/2012	2	911,988	4,578	
5/11/2012	10	936,837	24,849	
5/13/2012	2	944,884	8,047	
5/17/2012	4	953,956	41,968	
5/18/2012	1	955,672	1,716	
5/20/2012	2	964,146	8,474	
5/25/2012	5	965,021	875	
5/27/2012	2	988,384	23,363	
5/27/2012	0	990,480	2,096	
5/28/2012	1	996,077	5,597	
5/28/2012	0	997,659	1,582	
6/1/2012	4	1,008,092	10,433	
6/3/2012	2	1,011,812	3,720	
6/8/2012	5	1,020,734	8,922	
6/10/2012	2	1,028,163	7,429	
6/15/2012	5	1,037,008	8,845	
6/19/2012	4	1,043,598	6,590	

Unmetered Non-Potable Water Use

Water for spot irrigation and dust abatement use is separate and metered (meter is currently under repair). No lawns or gardens were observed during the site visit and outdoor irrigation is primarily to extend the life of key decorative, native shrubbery. The use of non-native ornamental shrubs is kept to a minimum (Figure 4). Heavy tree cover and minimal irrigation prohibit the use of aerial photography to document irrigation water use. Photos from the site visit are attached in Appendix C. Dust abatement primarily occurs during the summer during work weekends and holidays when road travel is high.

Figure 4. ACWUA Example Lot Photo.

Proposed project plans and specifications

The new well source serving the Andy Creek public water system was placed into service in 2011 and has been the primary domestic water source since that time. No changes to the potable and non-potable water system infrastructure are anticipated at this time.

Municipal Water Supply Analysis

Out of an abundance of caution, ACWUA proposed to change the purpose of use to municipal water supply. However, a major issue affecting the tentative determination of the water right is whether the right was issued for municipal water supply purpose. This issue is complicated by continued litigation over elements of the Municipal Water Law (e.g. appeals on *Cornelius et al v. Ecology and WSU* (PCHB 06-099)).

The Board first considered whether a change in purpose of use was even necessary. If Court Claim 1318 met the definition of a municipal water supplier as issued, then no change in purpose is necessary. Rather the purpose can simply be conformed to municipal as part of this change process (RCW 90.03.560).

RCW 90.03.015(4) defines municipal water supply purposes as: " "*Municipal water supply purposes" means a beneficial use of water: (a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year; (b) for governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or (c) indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use. If water is beneficially used under a water right for the purposes listed in (a), (b), or (c) of this subsection, any other beneficial use of water under the right generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial,*

irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes."

Based on the DOH WFI and information from ACWUA (page 8), the water system history, and recent meter data (page 8) ACWUA supplies 2 full-time residences. Therefore, compliance under the first definition in RCW 90.03.015(4)(a), 15 or more residences, does not appear to be met. Turning next to the non-resident population portion of the same section, ACWUA supplies 70 part-time residences with a population ranging from approximately 20 to 125 people. The question of whether these demographics meet the statutory definition is complex and it requires a case-by-case review. The Board is unaware of any case law that adds clarity to this issue. Absent that, the Board undertook the following analysis based on the plain-reading of the statute and a word-by-word assessment of the following section:

> *". . . residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year".*

1. Is the water provided "residential"? Yes. The full range of residential water users are present, including drinking, cooking, bathing, laundry, sanitation, and small ancillary uses such as dust abatement and irrigation.
2. Is the water for a nonresidential population? Yes. A non-resident is someone who does not live there full-time. The WFI describes the demographics to include part-time residents. Ecology Policy 2030 describes vacation homes and temporary farm worker housing as the types of uses which were likely municipal. Vacation home is an accurate description of nearly all of ACWUA's demographics.
3. Is there, on average, at least 25 non-residents served each year? Yes. While the Board did not look at past WFI's to determine a year-to-year evaluation, long time cabin owners indicate that generally the population has been stable since Surface Water Certificate 5691 was granted. Taking into consideration only the part-time residential population for the WFI, the WFI averages 70 people for each month of the year.
4. Are they there, on average, at least sixty days a year? Yes. Again, looking at the WFI and meter data for the non-summer season, there are approximately 9 months when at least 25 non-residents are being served throughout the year.

It appears likely to the Board that Court Claim 1318, as issued, meets the criteria in RCW 90.03.015(4)(b) and is currently in compliance therewith.

In making its tentative determination, the Board predicates its analysis that Court Claim 1318 as issued and as currently used is in compliance with the municipal water law and, if subsequently demonstrated through judicial clarification to be incorrect, that a change in purpose to municipal is appropriate.

Tentative Determination of the Extent and Validity of Court Claim 1318

In order to make a water right change decision, the Board must make a tentative determination on the validity and extent of the right. The Board has made the tentative determination as displayed upon the first page of this report. Although reliable metering data is not available, and aerial photography is limited, the Board notes that the Acquavella Court concluded 10 acre-feet was the extent of this water right and demographics have not changed since the Court heard testimony and had access to more comprehensive metering data at that time. Further, even if there were nonuse, the Board has found that the water right, as issued, was for municipal supply. This is a qualifying relinquishment exception.

The Andy Creek diversion has remained in good operating condition, has not been abandoned, and would also qualify as a standby / reserve source of water in the event of well failure, which is another sufficient cause identified as a relinquishment exemption. For example, each year, at the ACWUA annual "work party", they utilize between 4 and 10 cabin-volunteers to hike up to the pond to drain, clean out the accumulated mud, repair the reservoir fence, and maintain the brick filtration structure. All of this effort is to enable the use of surface water for irrigating cabin lots, facilitating auxiliary fire containment, and dust abatement of Andy Creek's dirt/gravel roads.

Finally, in conforming the purpose of use to municipal water supply, the Board notes that the term "backup supply" as referenced in the Report of Referee should not be carried forward. The Board has reviewed Ecology Policy 1040 on Use of Terms That Clarify Relationships Between Water Rights. The Court's use of this term did not convey any kind of "supplemental" or "non-additive" relationship on ACWUA's water right. It was issued as a "primary" certificate originally, and the Court did not change its character through an extent and validity determination. It continued to be used as a primary water right from an unauthorized source that is being remedied through this authorization. There is no other water right for it to be supplemental to, as the USFS had only an exempt well and the agreement between ACWUA and USFS was only for use of the well, not any USFS water right (see Agreement in Appendix D).

Other water rights appurtenant to the property (if applicable)

No other water rights are associated with the Andy Creek property. No other water right is used out of the new ACWUA well. The subject certificate has been adjudicated and Andy Creek does not rely on any other water right but the subject water right. The USFS well is no longer used by Andy Creek and is only authorized as a permit exempt

well. Note that the USFS well is the subject of a cancelled permit (GWP 06922) that was cancelled in 1965 due to lack of diligence. This predates any use of the well by ACWUA and clarifies that ACWUA was not relying on any USFS water right during from 1980 to 2010, but rather their own water right.

Public Interest

Because this change proposes a surface to ground transfer, the Board considered whether the transfer was detrimental to the public interest. This transfer improves the public reliability of the water system, it complies with an existing DOH authorization for the well source, it corrects a long-standing water right defacto change and place of use error, and it resolves uncertainty regarding the municipal status of the water right. Public water systems are to be encouraged, and Andy Creek has diligently maintained its system to provide high quality water. No protestant or commenter raised any concerns regarding this change. The Board concludes that the transfer is not detrimental to the public interest.

Development Schedule

The Board recognizes this as a defacto change. All construction and beneficial use associated with the project has been completed. Both the well and Andy Creek sources are metered. The Andy Creek meter will be repaired this fall and readings taken and reported each year. Under Ecology POL 1280, Andy Creek desires no development schedule to complete this change and that Ecology merely provide the required notice to the Acquavella Court to ensure the attributes of the water right that have been changed are reflected in the adjudicated certificate when issued. No proof inspection is needed for this transfer.

Geologic, Hydrogeologic, or other scientific investigations (if applicable)

This change application involves the transfer of a water right from a surface water point of diversion to a groundwater point of withdrawal and therefore requires a characterization of the hydrogeologic setting to determine whether water is available for appropriation. The following hydrogeologic characterization is based on review of information obtained from well logs in Ecology's database (Appendix D), geologic information in a 1:100,000 scale map compilation from Washington Department of Natural Resources (WDNR, 2012), aerial photos, information contained in the Project Report Source Approval (Gray and Osborne, 2011) and observations from a site visit conducted on June 22, 2012. A stamped hydrogeologic report is provided in Appendix F.

The geologic setting in the vicinity of the Andy Creek Summer Homes Tract (Figure 5) is characterized by bedrock uplands mapped as marine sedimentary rocks of the clastic unit of the Russell Ranch Formation (Cretaceous-Jurassic) overlain by quaternary alluvial deposits in the Indian Creek drainage. Examination of aerial photos and field observations indicate Indian Creek transported substantial alluvium from upstream sources depositing them within the flood plain and at the mouth to Rimrock Lake. Well log data from three wells at the Indian Creek Campground (Figure 5, Appendix C) indicate alluvium comprised of silt, sand, gravel, cobbles and boulders is present up to 107 feet thick (USFS Well No. AFL-752). The mapped width of alluvium comprising the Indian Creek floodplain is over 2,000 feet near the mouth of Indian Creek.

Major hydrogeologic units include the bedrock and overlying alluvium with the alluvium comprising the principal aquifer. The bedrock aquifer appears to have limited potential as a groundwater resource. Of the three wells completed in bedrock in the vicinity of the Andy Creek Summer Homes Tract, one yields 10 gpm and the other two are dry.

Wells completed in the alluvium include the three wells at the Indian Creek Campground that are located in close proximity of each other (Figure 5). The ACWUA well and Silver Beach Resort well are located about 500 feet north of the lake and the USFS well is located about 350 feet north of the lake. All three wells were bored into bedrock at depths ranging from 88 feet at the Silver Beach Resort well to 107 feet at the USFS well. The boreholes at the ACWUA and Silver Beach Resort wells were backfilled to the base of overlying alluvium. The aquifer appears to be about 100 feet thick and unconfined in the vicinity of the Campground based on water levels and drillers' stratigraphic descriptions in well logs. Well yields in the alluvium are high. Well log data indicate yields recorded at the time of drilling range from 60 gpm at Silver Beach Resort well to 105 gpm at the USFS well with 75 gpm at the ACWUA well. Results of a brief pumping test at the ACWUA are described below.

Groundwater Levels and Flow Directions.

Water levels in the alluvial wells recorded at the time of drilling range from 20 to30 feet below ground surface (bgs). Water level measurements recorded at the ACWUA well in late 2011 and early 2012 indicate the water level in this well was stable at 23 feet. A water level recorded on the inside wall of the USFS well house indicates static water level (no date) is 21 feet. Data are limited to confirm groundwater flow directions in the alluvium that are generally assumed to flow toward the lake as it comprises a local discharge zone within the greater Tieton valley. Water levels in the lake fluctuate with reservoir operations. Although available data are insufficient to quantify impacts of lake level fluctuations on groundwater levels in the alluvial aquifer, information contained in well logs and in Table 3 suggest water levels are relatively constant throughout the year.

Well construction of the ACWUA well.

The driller's log indicates silt, silty sand and gravel and coarse sand and gravel were encountered to a depth of 97 feet. Bedrock was encountered from 97 feet to 102 feet. The well is cased to a depth of 88.5 feet with 8-inch casing, screened from 88.5 feet to 97 feet in coarse sand and gravel, and filter-packed with silica from 97 feet to 101 feet. Records from the pumping test (contained in Gray and Osborn, 2011) indicate the pump is set at 60 feet.

Pumping Test at the ACWUA well.

Pumping tests can provide information regarding aquifer properties, well construction and groundwater continuity with the lake. Results of a brief constant rate pumping test performed on the ACWUA well on September 22, 2010 are contained in Gray and Osborne (2011). No observation well water level measurements were recorded. The drawdown of groundwater measured in the pumping well during the constant-rate pumping test is shown in Figure 6. The well was pumped at a constant rate of 60 gpm for about 4.5 hours. A dynamic drawdown water level of 11 feet below static water level was achieved within the first 15 minutes after the test began and the well recovered rapidly after pumping was stopped. The pumping test indicates the well has a specific capacity of 5.5 gpm per foot of drawdown. The transmissivity (in units of gallons per day per foot [gpd/ft]) of an unconfined aquifer can be estimated as on the order of 1,500 times the specific capacity (Driscoll, 1986). In this case, the transmissivity is estimated at 8,250 gpd/ft, or 1,100 feet squared per day (ft^2/day). Although the duration of the pumping test was too short to confirm (a standard constant rate test should be run from between 24 to 72 hours), it is highly likely the lake serves as a recharge boundary.

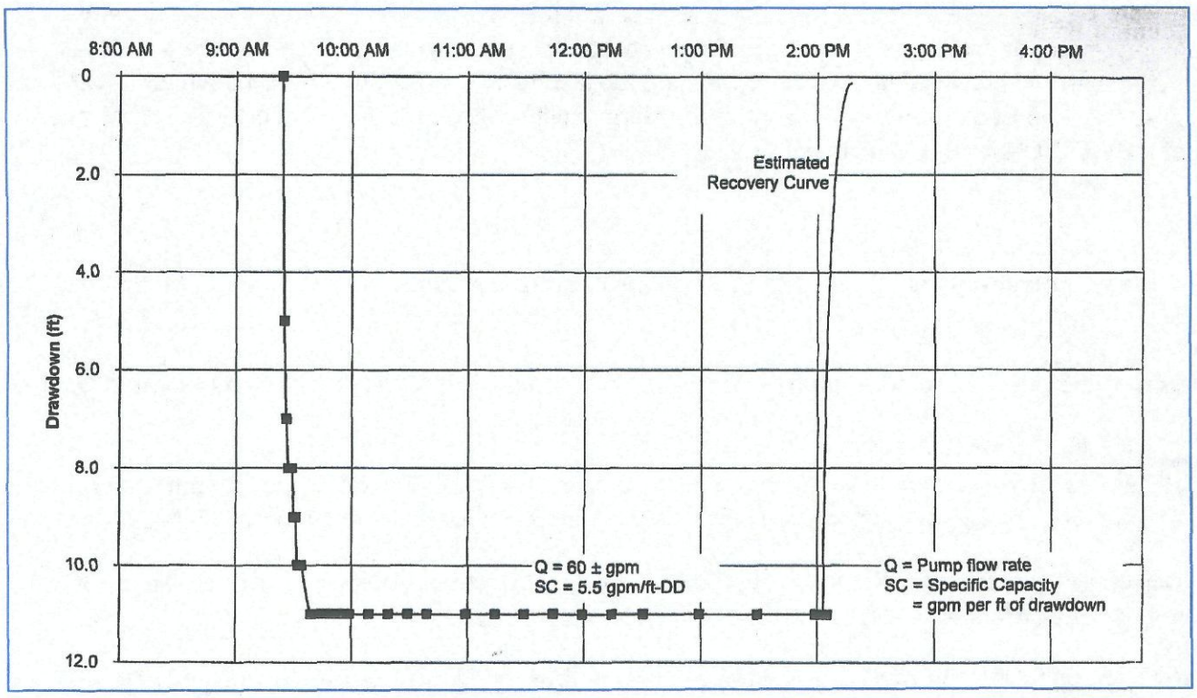

Figure 6. Plot for pumping test conducted at the ACWUA well (Well No. BAE-935) on September 22, 2010 (from Gray and Osborne, 2011).

Conclusions.

The proposed new point of withdrawal would pump from the alluvial aquifer that has potential to provide significant water supply in hydraulic continuity with Rimrock Lake. Based on transmissivity estimated at 1,100 ft^2/day and the proximity of the lake that likely forms a recharge boundary, the alluvial aquifer is more than adequate to support sustained pumping of 90 gpm from the ACWUA well. The lake serves as a local groundwater discharge zone within the Tieton valley. Considering that Andy Creek and the alluvial aquifer are tributary to the lake at nearly the same location near the Campground, the total water supply available in the lake and at the Parker Gauge near Yakima (Bureau of Reclamation regulatory control point) will be unaffected by withdrawals taken at the ACWUA well.

The information or conclusions in this section was authored and/or developed by Bill Sullivan and Dan Haller, consultants for the applicant, and members of the Board Dave Brown, Dave England, and Mark Reynolds.

Impairment

Impairment to Groundwater Rights

The potential for impairment to groundwater wells was evaluated by estimating impacts to water levels in the well closest to the proposed groundwater source. Ecology's database of water well reports and water rights records were reviewed to identify groundwater rights and potential exempt domestic wells located near the proposed groundwater source. The Silver Beach Resort well (BAE-936) is located about 50 feet west and the USFS well (AFL-752) is located about 140 feet south of the ACWUA well. Both wells withdraw from the alluvial aquifer. There are no groundwater rights shown in the vicinity of the proposed point of withdrawal. The Silver Beach

Resort well is assumed to be operating as a permit exempt well[1] and no permitted water right is known to be associated with the USFS well (Teresa Mitchell, Department of Ecology, email communication, March 6, 2012, Appendix E).

For the purpose of this analysis, it was assumed that groundwater would be withdrawn at a continuous rate of 90 gpm over 365 days. As discussed above, aquifer transmissivity is estimated to be approximately 1,100 ft^2/d. A storativity of 0.2 was assumed, using typical values for an unconfined, coarse-grained sand and gravel aquifer. Using these assumptions with the Theis solution (Theis, 1935) results in estimated drawdowns at the Silver Beach Resort well (nearest well) of 9.4 feet and at the USFS well of 7.1 feet at the end of the year-long pumping period.

The estimated drawdown at the nearest wells is less than the available head (i.e., height of water column in the well above the screen intake) in these wells. Available head is 52 feet in the Silver Beach Resort well and 59 feet in the USFS well. Given the relatively large available head relative to the predicted drawdown, pumping at the ACWUA well will not result in induced drawdown to below the top of the screened interval or to below pump intake depths for these or other properly constructed wells in the area. Therefore, the proposed change in the point of withdrawal to a groundwater source will not impair existing groundwater rights or exempt domestic wells.

Impairment to Surface Water Rights

Ecology water right records were reviewed to identify surface water rights with diversions located downstream of the proposed point of withdrawal. The alluvial aquifer proposed for withdrawal is tributary to the lake. No surface water rights were identified between the ACWUA well and the lake which lies about 500 feet down gradient from the well. Because the proposed change will not result in enlargement of the existing right, no surface water rights downstream of the ACWUA well will be impaired.

References

Driscoll, F.G., 1986, Groundwater and Wells (2nd ed.), Johnson Filtration Systems, Inc., St. Paul, Minnesota, 1089 p.

Gray and Osborne, Inc., 2011, Project Report Source Approval, Andy Creek Water Users Association, January, 2011.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage, Transactions, American Geophysical Union 16: 519–524.

Washington Department of Natural Resources (WDNR), 2012, Interactive Geologic Map, available online at http://www.dnr.wa.gov/researchscience/topics/geosciencesdata/pages/geology_portal.aspx)

The information or conclusions in this section was authored and/or developed by Bill Sullivan and Dan Haller, consultants for the applicant, and members of the Board Dave Brown, Dave England, and Mark Reynolds.

CONCLUSIONS [See WAC 173-153-130(6)(d)]

Tentative determination (validity and extent of the right)

The board concludes that Court Claim 1318 remains valid in the same extent as confirmed by the Acquavella Court.

Relinquishment or abandonment concerns

The Board finds that there has been no nonuse resulting in relinquishment or abandonment. Use appears to be similar to that confirmed by the Acquavella Court. Several relinquishment exemptions would excuse nonuse, including municipal water supply.

Consideration of comments and protests and SEPA

No comments or protests were received. SEPA was appropriate complied with by using the groundwater exemption.

Impairment

The Board evaluated whether this transfer would impair existing water rights including water right exempt wells. Upon reviewing the preceding impairment assessment, the Board has determined the proposed new point of withdrawal will not result in impairment to existing water rights.

The Board evaluated whether adequate water is physically available to support the proposed new point of withdrawal and whether the body of water proposed for withdrawal is in hydraulic continuity with the water source authorized in Court Claim 1318. Upon reviewing the following hydrogeologic assessment, the Board has

[1] Alternatively, Silver Beach Resort may, like ACCA, be operating under a defacto change of a surface water right to their well, as the USFS holds a 0.05 cfs certificate for Andy Creek (Certificate 9222).

determined the proposed water source is adequate and in hydraulic continuity with the water source originally authorized.

Public Interest

The Board concludes that the transfer is not detrimental to the public interest.

DECISION [See WAC 173-153-130(6)(e)]

The following table summarizes the transfer of the subject water right.

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE
0.20	90	10	Continuous municipal water supply

SOURCE	TRIBUTARY OF (IF SURFACE WATER)
Well No. BAE-935 and Andy Creek	

AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
13130699992	NE	SE	6	13	13 EWM	38	Yakima
13143199992	S 1/2	SE	31	13	13 EWM		

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED AS APPROVED BY THE BOARD

The place of use shall be the Andy Creek Summer Home Tract within the NW ¼ Section 5, of unsurveyed T 13N, R 13 EWM, Snoqualmie National Forest and SE ¼ NE ¼ Section 6, T 13 N, R 13 EWM.

PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,
13130599992		NW	5	13	13 EWM
13130699992	SE	NE	6	13	13 EWM

The information or conclusions in this section was authored and/or developed by Bill Sullivan and Dan Haller, consultants for the applicant, and members of the Board Dave Brown, Dave England, and Mark Reynolds.

PROVISIONS [See WAC 173-153-130(6)(f)]

The following provisions are to be included as a part the Board's decision:

1. This authorization shall in no way excuse the permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations including those administered by other programs of the Department of Ecology.
2. A certificate shall be issued to the applicant by the Department of Ecology consistent with the Acquavella adjudication final decree process.
3. An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC.
4. Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.
5. Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements".
6. Water use data shall be recorded weekly when the sources are in operation. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year. Reported water use data shall be submitted via the Internet or by using forms available at the Central Regional Office of the Department of Ecology in Yakima. To set up an Internet reporting account, access https://fortress.wa.gov/ecy/wrx/wrx/Meteringx/. If you have questions or need forms, contact the Central Regional office.

Construction Schedule

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE:
Completed	Completed	Completed

This change represents a defacto change under Ecology Policy 1280. The Board believes no further work other than this authorization is necessary to effectuate this change.

The information or conclusions in this section was authored and/or developed by Bill Sullivan and Dan Haller, consultants for the applicant, and members of the Board Dave Brown, Dave England, and Mark Reynolds.

The undersigned board commissioner certifies that he/she understands the board is responsible "to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." [WAC 173-153-130(5)] The undersigned therefore, certifies that he/she, having reviewed the report of examination, knows and understands the content of this report and concurs with the report's conclusions.

Continued

Signed at Yakima, Washington
This 6 day of September, 2012

Brown

Dave ~~England~~, Board Representative
Yakima County Water Conservancy Board